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PurchasingWorld®

THE BUYER'S MAGAZINE DECEMBER 1988

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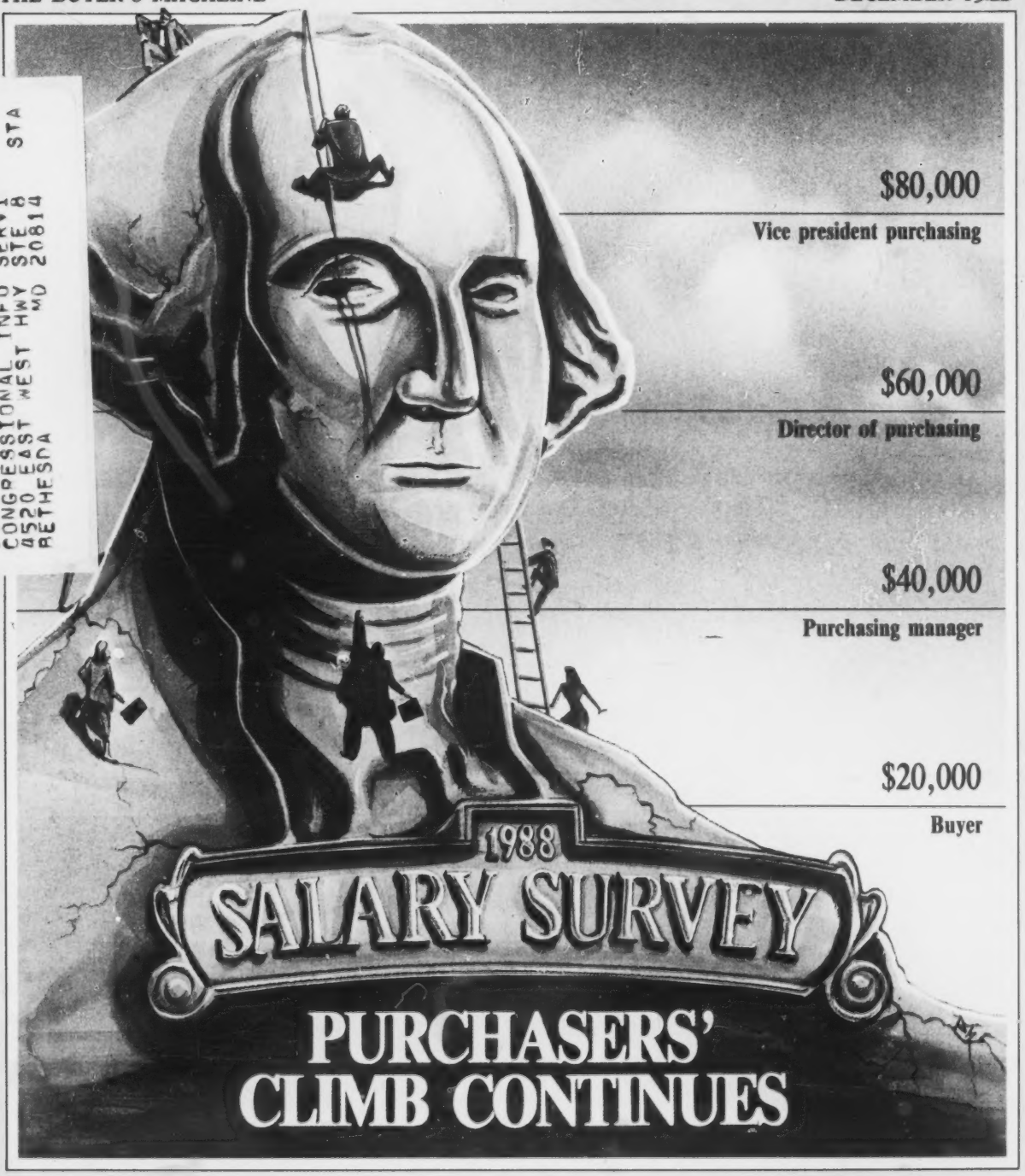

PW's 1988 Buyer of the year

New, revised transportation forecast • First look at 1989 prices

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Cover Illustration and Design by Andy Shive.

Airlines are willing to cut a deal for you

"There is an increased willingness on the airline carrier's part to negotiate deals directly with corporations based on volume between city pairs," says Jeanie Thompson-Smith, president of Topaz Enterprises, Inc., Portland, OR. A recent study conducted by Topaz shows that 10.5% of the tickets audited in the second quarter of 1988 were booked in unpublished, negotiated airfares.

To bargain with airlines, says Thompson-Smith, "The corporation must identify the carriers serving the markets they frequent, and be able to provide volume statistics on specific city pairs in order to negotiate a deal." These findings are documented in the Topaz Corporate Fare Guide which consists of four quarterly reports and their *Handbook to Lowest Fares.* The annual subscription fee is $95. *Topaz Enterprises, Inc.* **Circle 100**

Independent guide to buying fax machines

To help purchasing managers make intelligent selections of facsimile machines, Daniel Fishman and Elliot King have written, *The Book of Fax: An Impartial Guide to Buying and Using Facsimile Machines.* Neither author is connected with any fax supplier: Fishman is founder of a computer and technology consulting firm; King teaches communications at the University of California at San Diego.

For first-time buyers the book will help evaluate whether you need a fax, determine which would be the most economical fax, show the best fax features, and help you avoid common, costly buying mistakes. *Ventana Press.* **Circle 88**

Simple product can cut clean-up costs by 30%

Time and motion studies show that industrial clean-up costs can be reduced by nearly one-third using the "bag ringer" being marketed by Gulf-Pacific Marketing. The device allows the user to attach any size plastic garbage bag to the ring-shaped hoop with its elastic core. The device then holds the plastic garbage bag in an open position and stabilizes it so the user can easily drop debris into the open bag. *Gulf-Pacific Marketing.* **Circle 101**

100% accurate fingerprint identification system

A compact, self-contained system that quickly confirms or rejects the identity of a contractor, supplier, visitor or other pre-authorized person by verifying one fingerprint is available from Comparator Systems Corp.

The Comparator ID-1 verification system automatically compares the fingerprint taken at the time identification is sought with a fingerprint on a file card. In three to five seconds the identity is verified by a green light or rejected by a red light.

The verification unit takes less than 0.4 cubic feet of space and weighs 17½ pounds. *Comparator Systems Corp.* **Circle 102**

Want a robot? Now you can "rent a robot"

For a flat amount of $580 per month, regardless of the number of shifts or hours worked, you can rent a robot from E-Mat. This translates into $3.35 per hour for a single shift, $1.68 for two shifts, and $1.12 hourly for three-shift operations.

The firm offers light, medium and heavy robots, with a capacity of 10, 30 and 200 pounds respectively. According to Fred Nussbaum, director of sales, "American manufacturing still views robotics as an expensive, highly specialized and risky alternative to traditional special designs or manual operations." *E-Mat Corp.* **Circle 87**

PurchasingWorld

6521 Davis Industrial Parkway
Solon, OH 44139
Phone: 216-248-1125

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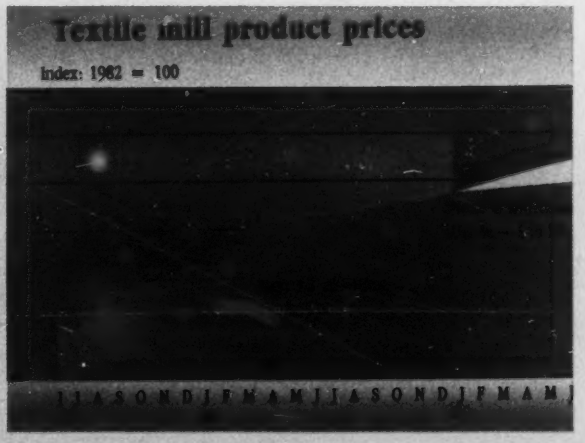
Apparel slump hurts textiles

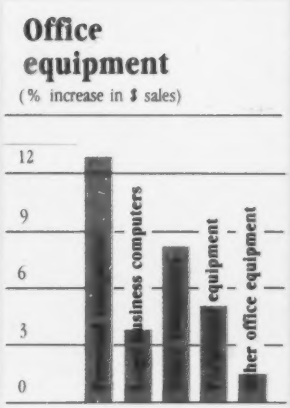
CURRENT SITUATION: It's been a lackluster year—with buyers holding back—and demand (as measured by textile mill production) barely equalling last year's levels. And all this despite a fall-off in imports which now look to lag last year by about 8-9% on a square yard equivalent basis. Prices, meantime, have been mixed. A jump in wool tabs has pushed woolen fabrics up. But lower cotton has helped offset rising synthetic fibers.

DEMAND: The buying slump reflects consumer reticence to spend on new apparel. Industrial demand hasn't been setting the world on fire either—as auto purchases do little more than mark time. **In general, however, heavier weight fabrics have been softest.** Nor can such apparel fabrics as fleecewear, tricot, woven/knits, and denim be called particularly buoyant. As for 1989, little more than a flat pattern is seen.

SUPPLY: Markets have loosened up considerably and are expected to remain that way—as some fabric inventories remain on the high side. Note, too, that operating rates for the industry have dropped nearly five percentage points from 1987 highs—to under 90% at last report. Imports, despite declines, also remain a factor to reckon with when considering availability. And the industry continues to invest in more efficient equipment.

PRICE OUTLOOK: Little more than a 1% overall advance is projected for the first half of 1989. But averages will hide substantial variation. On the fiber front, for example, polyester, rayon and nylon will continue to go up. Ditto, acrylics which are scheduled for a March hike. But wool tags should level off (albeit at very high levels) and cotton could well edge down given today's high and still-rising stocks.





Computer, other equip prices slowing

Demand gains for computer and other office machinery may be slowing down. In-Stat, a Scottsdale, AZ consulting firm, puts 1989 price increases (in current dollars) at only 12.7%, far under the 37.0% boost recorded last year. Add in more expensive computers, and the gain drops down to only 7.2%. Non-computer office equipment also faces rough sledding, with only a 1% advance envisioned. All this suggests new price uneasiness—especially for memory chips which are already beginning to ease up.

Copper supply still iffy

Prices remain extremely nervous, as global work stoppages play hob with an already snug supply. But look for some substantial erosion by next spring as supply and demand come back into better balance and as some of today's double and triple ordering dries up. While it's always hard to pin a price on the volatile metal, most fundamentals would seem to point to an average price of around 85¢/lb in 1989. While about 30¢/lb under this year's estimated average, that would still be high enough to insure a good bottom line performance by most world producers.

Steel prices weaken

The substantial price uptrend of the past year or two shows signs of running out of steam. Weakness is also reported in oil country tubular items—and resistance is expected on a new $25-30/ton bar increase. For the longer pull, the composite price which rose by more than 5% last year and in excess of 7% during the current year, will be lucky to see a 3% advance in 1989. Reason: Expectations of declining shipments which will only reach about 77 million tons over 1989 (*versus* 82 million in 1988).

Flying will cost more

Some business trips will be costing a lot more. Most carriers are eliminating discounts on tickets purchased 3-7 days in advance and on unrestricted one-way fares. Typical: Some tickets from Chicago to Los Angeles, previously costing from $239 to $342, now go for an eye-opening $525. Unchanged, however, are dis-

counts offered on 14-day advance purchase tickets and in other fares with long leadtimes. It's doubtful many businessmen can schedule that far ahead to take advantage of these substantial bargains.

The mail picks up

The U.S. Postal Service has or is about to implement these new service improvements:

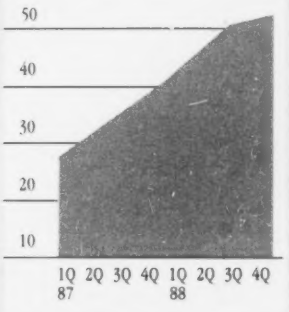
- On-demand Express Mail pickup (already implemented)
- Computerized cash registers to speed complex postal window transactions (already available in 40% of the nation)
- Customer-operated weighing and rating machines (a 5-year program just getting underway)
- The $8.75 Express Mail stamp (already available)
- Stamp availability in retail stores (in some outlets and being expanded)
- Stamps at automated teller machines (testing in Seattle)
- Buying Express Mail postage with consumer credit cards (being tested)
- Collect-on-delivery options for Express Mail (already available)
- Paying for Express Mail with check deposited in collection box with mail (testing to begin soon).

LDPE prices ease

Prime resins remain unchanged, but there has been a big increase in the supply of off-spec material from resellers and traders—

Low-density polyethylene liner

(1989 vs. 1988) (¢/lb)



originally destined for export. There has been a sharp decline in film demand—thereby forcing a 5% fall-off in prices. Affected are industrial applications and agricultural film—with another 5-10% price decrease possible, particularly on the East and West coasts, where most of the excess extrusion capacity is centered.

Auto prices reflect improved quality

One consolation for higher 1989 sticker prices—up $560, on average—is that one-third of this boost, according to a new government report, reflects increased quality rather than "pure" price increase. Roughly $183 of the advance can be traced to decisions to make some optional equipment standard and to make improvements in powertrains and corrosion protection. Another $23 reflects the installation of more passive restraint devices.

Aluminum ingot levels out

CURRENT SITUATION: Ingot has temporarily leveled off after falling from the high $1.25/lb level of last spring. But quotes (still well over $1/lb) are some 25-30% above a year ago. Fabricated tags are up considerably less—especially in such competitive areas as can sheet which have been frozen at current levels through first quarter 1989. On the other hand, some increases are scheduled for early next year—notably a 10¢/lb boost on 6061 flat-rolled products.

DEMAND: Overall domestic shipments should total 16.5 billion pounds this year (*versus* 16.2 billion in 1987)—and grow to about 16.7 billion in 1989 (setting a record for the fourth consecutive year). And the same pattern is seen for the entire Free World where this year's estimated 14 million metric ton consumption total represents a 2%-plus gain over 1987. And again a small advance to 14.3 million tons is projected for 1989. As for specific markets—1989 will see a 7% increase in beverage cans. Transportation will also remain strong.

SUPPLY: Don't expect any dramatic easing up as still-increasing demand offsets to a large extent the restarting of mothballed potlines. Sign of the times here: Free World stocks of primary ingot remain near their historic lows. A further jump in the global operating rate (from 95.6% this year to 98.1% in 1989) could add 500,000 tons to the overall supply. But some 300,000 tons of this will be chewed up by increasing consumption.

PRICE OUTLOOK: A modest edging down in ingot can't be ruled out for the next few quarters—given the slowly improving supply situation envisioned. But further scattered advances in fabricated products are still likely for early 1989.

Import prices taking a breather

The long climb in import prices seems to be taking a temporary breather.

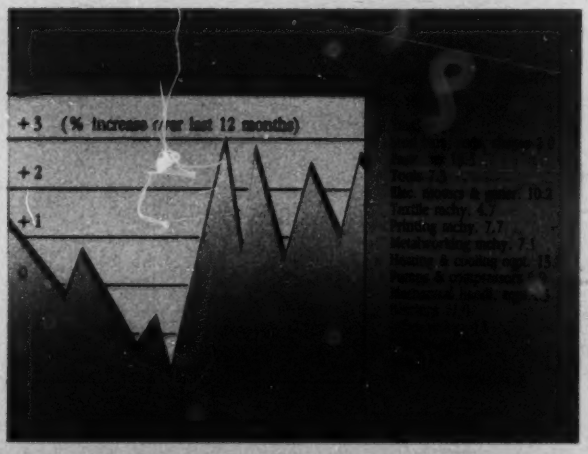
Even if the sharp decline in fuel is factored out, averages are still down 0.6% from three months earlier. That's the first such drop since early 1985—as seven of eight key sub-groups edged lower.

Credit the drop-off to the recent leveling off of the dollar. But since the dollar is beginning to ease again, the upward climb in import quotes could resúme as early as first quarter 1989.

Even with the latest decline, average import tabs (ex fuel) are 7.2% ahead of a year ago—and better than 26% above levels prevailing in 1985 when prices began to rise.

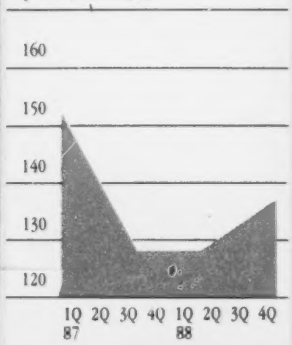
Meantime, here's a more detailed rundown of the weakening trend noted over the past three months:

- **Crude materials:** Prices dropped 1.8%—as small boosts in pulp and wastepaper were more than offset by sharp declines in crude rubber and miscellaneous crude materials.
- **Chemicals:** The uptrend continued here—with averages up another 2.7%. Largest boosts were in drugs (5.1%), miscellaneous chemicals (4.6%), and organics (3.5%).
- **Intermediate products:** A fractional 0.1% drop followed a big 6.3% jump in the previous quarter. Deceleration was led by nonferrous metals, wood manufacturers, textiles, and nonmetallic mineral manufacturers. But steel was up slightly.
- **Machinery and transport equipment:** This category, most susceptible to dollar fluctuations, dropped 0.5% —the first fall since March 1985. Large decreases hit specialized machinery (4.1%), general industrial machinery (2.7%), and metalworking machinery (2.1%). Office machinery was off 0.9%. But a rise in electronic components pushed up the average for electrical machinery.



Frasch sulfur

[$/ton (ex Tampa)]



Sulfur markets stay strong

Strong markets, aided by demand from industrial chemicals and phosphate fertilizers, are making for the second price increase of the year. New Frasch quote (ex Tampa) is moving up $6/ton, to $138/ton. Adding to the upward push are the diminishing reserves of Frasch sulfur—1,312,000 metric tons at latest report *versus* 2,424,000 metric tons a year earlier. The increasing importance of recovered sulfur, with the latter now accounting for 70% of the nation's productive capacity, is a trend worth noting. This, in turn, suggests that over the long pull, producers of recovered material will be setting the price tone.

Paper and products upward

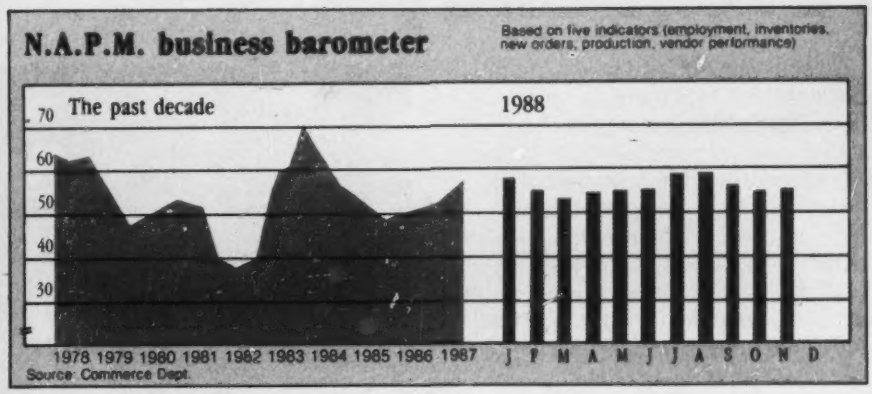
The trend is still up—with increases recently posted on uncoated free sheet, coated free sheet, forms bond, industrial tissue papers and bleached bristols. Two price tests also loom ahead for early next year. The first is for linerboard, where one producer has already announced hikes over the existing $410/ton level. But this may not hold as supplies begin to ease up. Also questionable is a newsprint boost which has already been reduced (from $45 to $30/metric ton) and delayed until February, 1989.

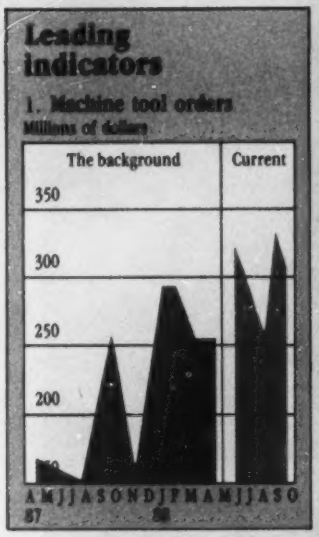
Cobalt prices exceed expectations

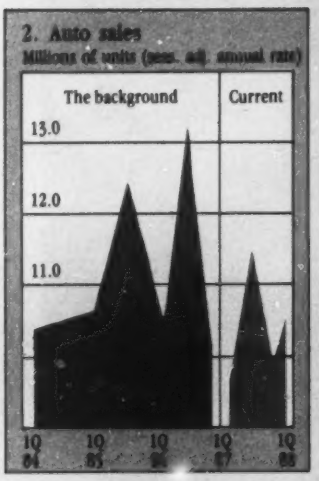
African producers are boosting lists to $8.40/lb (a rise of 12%). This is somewhat above the $8.00/lb level that many buyers had been expecting. But a rosier note is the carrot being extended by producers—namely a 2-year price guarantee through 1990—one year more than normally offered. Also most big buyers will continue to get discounts from this fixed producer quote. The price rise is putting upward pressure on merchant metal which has moved up above the near $7/lb levels of recent months.

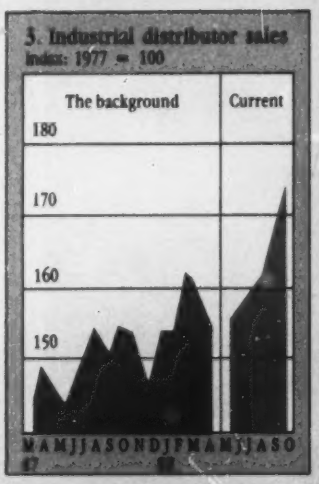
PVC holds steady

Pipe grade resin quotes are holding steady at 44¢/lb. Not so the major end-use product—pipe. Prices have slipped some 11-14¢/lb since mid-summer—pressured by a seasonal weakness in construction and loss of market share in the large diameter pipe market to ductile iron.


N.A.P.M. business barometer
Based on five indicators (employment, inventories, new orders, production, vendor performance)
The past decade
1988
70
60
50
40
30
1978 1979 1980 1981 1982 1983 1984 1985 1986 1987
J F M A M J J A S O N D
Source: Commerce Dept.







KEY ECONOMIC TRENDS

PMs will increase coatings buys

Purchasing managers will be buying a lot of coatings over the next few years. A 6.2% annual rate of advance in demand, for example, suggests over $10 billion in purchases this year and as much as $13.5 billion by 1992.

This projection, supplied by the Freedonia Group of Cleveland, also has some reassuring news about prices. Specifically, the average quote (now near $10/gallon) is expected to advance only 3.9% a year—considerably under the 5% increase of the past decade.

Buyers can also look forward to new formulations to meet stringent environmental curbs, higher performance finishes with improved properties, and continued development of solventless technologies such as powder coatings and radiation curable coatings. Also, water-based types will continue to displace oil-based products.

Architectural coatings, rising 5% a year, will show the slowest growth because of 1) market saturation, 2) increased longevity of the finishes, and 3) alternative materials such as glass, paneling, and plastic siding. OEM product coatings, rising 6.9% annually, will do better.

Moreover, zero in on powder coatings, and double-digit growth seems possible. In any case, technological advances here will encompass low-cure powders, faster curing processes, and improved field application systems for such markets as aluminum extrusions, outdoor furniture, and autos.

Special purpose coatings will do well, too—because of growing demand for high performance, sophisticated coatings for specialized applications such as bridges and industrial maintenance.

The study also notes that substantial merger and acquisition activity fueled growing capital requirements and increased product sophistication. Implication: PMs will be dealing with increasingly large suppliers in the years ahead.

U.S. loses dubious distinction

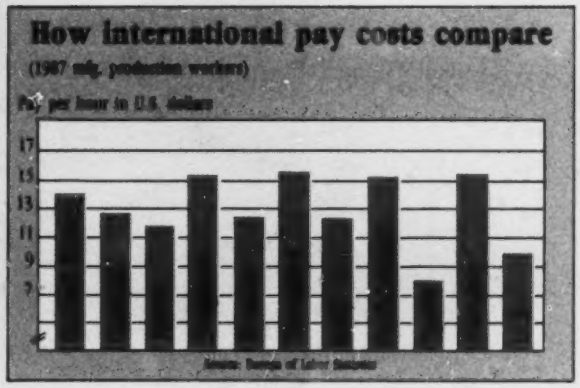
The United States is no longer the world's highest labor cost country.

That dubious distinction now goes to Switzerland—with pay rates in many other European nations at or above our levels. Even Japan no longer has all that much of an edge over this nation when it comes to pay rates.

Much of the change can be traced to the drop in the dollar *vis a vis* other currencies over the past few years. But another factor has been the smaller-than-overseas pay increases that U.S. workers have been getting.

The new figures, just released by the Bureau of Labor Statistics, also suggest that for the 26 countries surveyed, the average pay was 76% of the U.S. level—10% higher than in 1987.

Taking a closer look at the various countries—here's how they compare to the average $13.44/hour U.S. rate: Coming in at higher figures (in descending order) are Switzer-



land—$17.14/hour; Germany—$16.87/hour; Netherlands—$15.46/hour; Sweden—$15.12/hour, and Belgium—$15.02/hour.

The entire European Economic Community has a comparable rate to ours—$13.25/hour to be exact. And even Japan—clocked in at $11.14/hour—isn't that far behind. The latest 17% Japanese lag compares to a 50% lag two years earlier (before the yen began to appreciate relative to the dollar).

All the above is not to say that Third World countries don't have a big pay advantage.

CURRENT PRICES

1988 ends optimistically

The year is ending on a relatively optimistic note: The economy is growing, but not at such a fast pace as to precipitate any "crash landing" later on. And inflation, despite six years of uninterrupted growth, is still pretty much under control.

Reassurance of continued near-term advances comes from the latest NAPM barometer reading (see chart). The latest figure has actually moved further above the neutral 50 zone—but again not so far as to endanger the basic uptrend.

Also encouraging are predictions for an improving trade balance. The Treasury Department, for example, feels that the import deficit will continue to shrink through 1989 even without a further decline in the dollar.

Two factors are behind this optimism. One is that there have been fundamental changes by industry and labor—to cut costs and boost quality. This has to enhance the nation's long-term competitive position.

Then there's the new generation of foreign-owned factories being built in the U.S. This means we will be turning out increasing volumes of goods that otherwise would have to be imported.

Another positive factor in the overall outlook has to be the still-strong capital spending trend. New anticipation surveys suggest this will be continuing into 1989. So do recent gains in machinery orders. On the latter score, machine tool bookings at last report were running close to 80% above the comparable month of last year (see chart). And backlogs (now over $2 billion) are more than double the just-under-$1 billion level reported at the beginning of 1988.

Equally important, the advance here seems to be broadly based—covering a wide cross-section of American industry. Also noteworthy: Almost nobody is canceling previously placed orders.

The consumer sector can hardly be characterized as being ebullient. But even here some near-term improvement is likely. More to the point: Consumer confidence, after sagging early this fall, is again on the rise. Thus the widely monitored Conference Board index of consumer attitudes rose by more than 6% over the latest month.

This shows up in auto sales which, while below recent highs, are being maintained at a respectable 10.5 million annual rate (see chart). And this is likely to continue, for plans to buy new cars remain at relatively high levels.

Another sign that things are going well: Industrial distributor sales—a lead indicator of near-term factory production plans—has continued to advance (see chart). The figures are expressed in current dollars, But even if you take out the inflation factor, the gains remain impressive.

Unemployment remains low and job roles continue to increase. And they're likely to remain on the rise—given the still impressive number of want-ads appearing in our daily newspapers.

More and more economists are re-thinking their earlier predictions for a downturn sometime in 1989. As one puts it, "The 6-year old expansion could be stretched—for one year, for two years, and maybe even for three if we play our cards right."

That's why virtually all first half 1989 econometric forecasts are now calling for continuing gains. The consensus: Growth (as measured by real GNP) will be advancing at about a 2-3% annual rate over this six month period. And preliminary estimates for the second half are almost as bullish.

Industrial prices rising slowly

Industrial price increases continue in the tolerable range—as overall averages this past month rose by 0.2% (2.4% annual rate).

While another decline in energy tags helped keep the advance down, some help also came from other sectors. Worth noting in this respect: Of the 50 or so subgroups monitored every month by *PurchasingWorld* magazine, an impressive two out of five either remained unchanged or edged lower.

Coming back to specific areas—declines in the energy sphere were recorded for crude petroleum, jet fuel, liquid petroleum gas, and gasoline.

Only natural gas managed to rise. In all, energy averages fell 2.4% over the past month and are now more than 9% under year-ago levels.

Also encouraging (as far as buyers are concerned) was the leveling off in capital equipment after a 0.8% jump the previous month. The only products bucking the easing here were trucks, paper industry machinery and switchgear—all of which showed considerable advances.

Elsewhere, industrial chemicals—sparked by organics—showed a 2.0% advance. Plastic resins and paints also continued to rise, though at a considerably slower pace than in previous months.

Paper products kept rising, too. Increases over the past month hit paper office supplies in paperboard—with the latter now 12% above a year ago. Corrugated, however, took a breather—actually edging lower after the nearly uninterrupted boosts of earlier this year.

Metals were basically mixed. Aluminum slipped a bit, as did most precious metals. But steel moved slightly higher, and copper (faced with supply problems) continued going through the roof.

One surprise was the lack of any softness in construction materials. Increases were reported for nonferrous wire and cable, millwork, wiring devices, asphalt roofing and gypsum products. These more than offset small declines in plywood and plastic construction materials.

But the consensus here is for a general weakening over the next few months—on a combination of a seasonal demand fall-off and the general trend toward reduced construction activity.

STEEL SCENE

Steel gets more competitive

Steel buyers can probably look forward to more competitive markets over the next 12 months.

Reason: Demand will not only flatten out but may even decline. The Steel Service Center Institute is now projecting member shipments of only 23-23.3 million tons for 1988.

The new 1989 forecast is seconded by Michael D. Siegal, chairman of SSCI's communication committee and president of Cleveland's Olympic Steel. Siegal is forecasting about 23 million tons—with the decreases due to lower metal consumption and slightly less service center participation in the flat-rolled end of the business.

But he adds there's one imponderable—namely how much hedging will develop because of second-half wage negotiations at several of the integrated mills.

Siegal also notes the likelihood of a significant eight million ton inventory correction by mills, service centers and end users—a dramatic change after all the recent inventory building. Steel stocks rose an estimated six million tons during the first three quarters of 1988—and are expected to drop by more than two million tons.

It should be noted that this inventory retrenchment may already be underway. Distributor holdings at last report were down to 3½ months.

One possible reason for this increasing service center caution: Fourth quarter distributor shipments *vis a vis* a year ago have become relatively flat. And predictions of incoming orders for the next three months are pessimistic (34% predicting declines *versus* only 10% anticipating new gains).

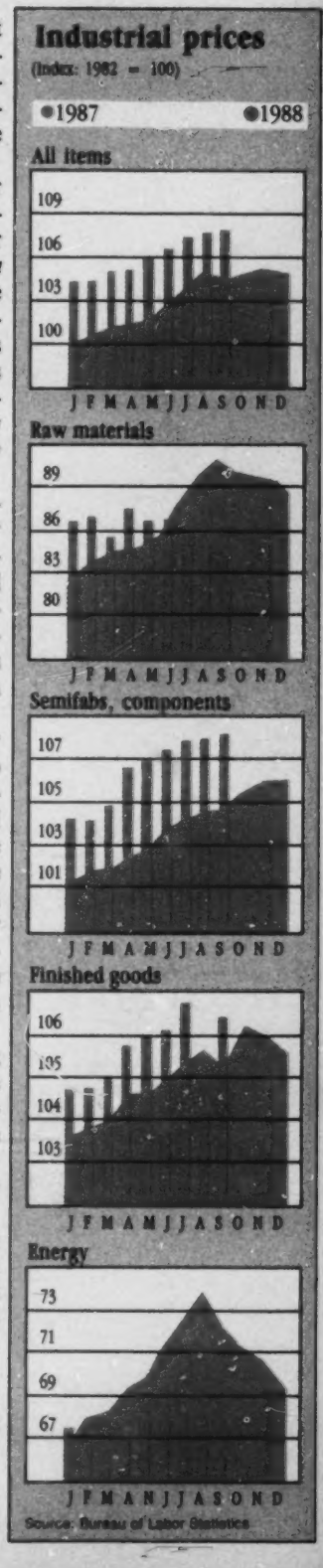
As for individual markets—the auto sector should begin to weaken beginning next spring. And the non-electrical machinery sphere should experience slower growth—as appliance demand takes a breather.

The less than spectacular purchasing pattern is also verified by PMs responding to the latest NAPM steel buyers survey. The projections here: Some 47% expect a decrease in their metal receipts over the next three months—drowning out a minuscule 3% who are planning on bigger buys.

Not surprising, the long leadtimes of a few months back have all but disappeared. And some service centers say material is now actually arriving earlier than contracted for.

As for price, one service center executive reports that flat rolled products are under extreme competitive pressure. In any case, these steel middlemen don't expect to pay much more than they are now for their mill purchases in 1989.

The latest SSCI survey finds only 20% planning



on higher replacement costs over the next six months. That's a far cry from the near 60% reading prevailing as recently as July.

Equally significant, the number of centers expecting declines (23%) now outnumbers those resigned to paying more (20%)—and 5% puts the erosion in the "over 5%" range through mid-1989.

Then, too, price trends are expected to differ depending on supply source. Several service centers feel that some of the smaller mills—hungry for business—may attempt to undercut prices.

While on the subject of prices—more distributors now report import savings. Roughly 25% say price breaks of 6-10% are currently available on carbon steel—the largest such percentage in a year and a half.

This month's breakdown

Index: 1982 = 100

	Latest level (Oct)	% change from: Month ago	Year ago
Bearings	118.2	0.4	9.3
Bolts, nuts, etc.	107.8	0.8	4.4
Chemicals, inorganic	102.8	0.1	8.4
Chemicals, organic	114.7	2.1	18.5
Concrete products	109.9	0.0	0.5
Corrugated cartons	111.4	−0.2	6.8
Cutting tools, small	107.8	0.7	1.5
Electric lamps (bulbs)	123.5	0.5	0.3
Electronic components	118.0	−0.1	2.3
Fans and blowers	114.0	0.6	4.5
Foundry and forge products	111.1	0.5	4.6
Fuel oil (residual)	38.8	−4.0	−25.1
Furniture, commercial	125.7	−0.1	5.0
Gasoline	56.1	−2.4	−6.7
Glass, flat	110.4	−0.3	1.9
Glass containers	112.0	−0.1	−0.6
Gypsum products	113.7	2.7	−5.1
Hand tools	121.8	0.7	4.3
Hand tools, power driven	112.1	0.1	2.7
Industrial furnaces	121.8	−0.2	6.0
Integrating and measuring instruments	115.0	0.7	0.6
Internal combustion engines	112.3	0.1	2.7
Lubricating oil	107.7	2.2	8.2
Lumber millwork	123.5	0.7	3.5
Material handling equipment	108.7	0.1	4.1
Metal containers	111.5	−0.3	1.7
Metal mill shapes (nonferrous)	135.7	1.9	21.9
Metal tanks	106.2	−0.4	8.4
Motors and generators	124.3	1.3	6.5
Motor trucks	130.3	8.4	4.2
Office and store equipment	107.8	0.2	2.1
Paperboard	136.5	0.1	11.8
Paper boxes and shipping containers	125.9	0.2	6.6
Paper office supplies	117.1	0.5	7.9
Paint	113.8	0.4	4.6
Plastic resins	139.8	0.6	19.7
Precision measuring tools	121.4	0.0	4.3
Pumps and compressors	110.4	0.4	4.7
Refractories	114.6	0.3	3.3
Rubber belts and belting	108.2	0.0	5.2
Scales and balances	106.3	−0.4	2.1
Steel products	112.4	0.4	6.5
Switchgear	114.3	0.9	3.5
Textiles, synthetic fibers	98.7	0.0	6.4
Textiles, gray fabrics	114.4	−0.3	3.7
Tires and tubes	95.0	0.1	4.3
Transformers and power regulators	108.6	0.0	1.7
Welding equipment	119.0	0.0	6.7
Wire and cable	132.3	3.2	19.1

NAPM procurement trends

(seasonally adjusted diffusion indexes)

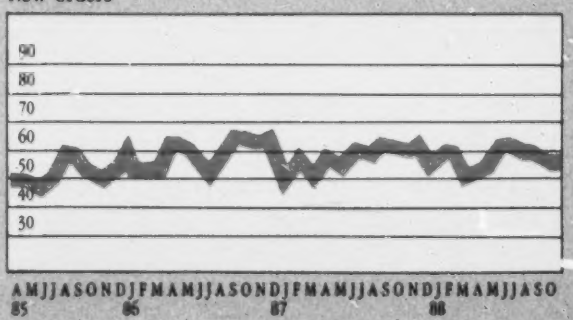
An index where 50 is defined as the neutral level, to the extent a reading is above 50, it represents an expansionary tendency. More particularly, rising inventory prices, and new orders are seen as positive signs of economic growth. A trend toward slower deliveries is similarly interpreted.

Inventories

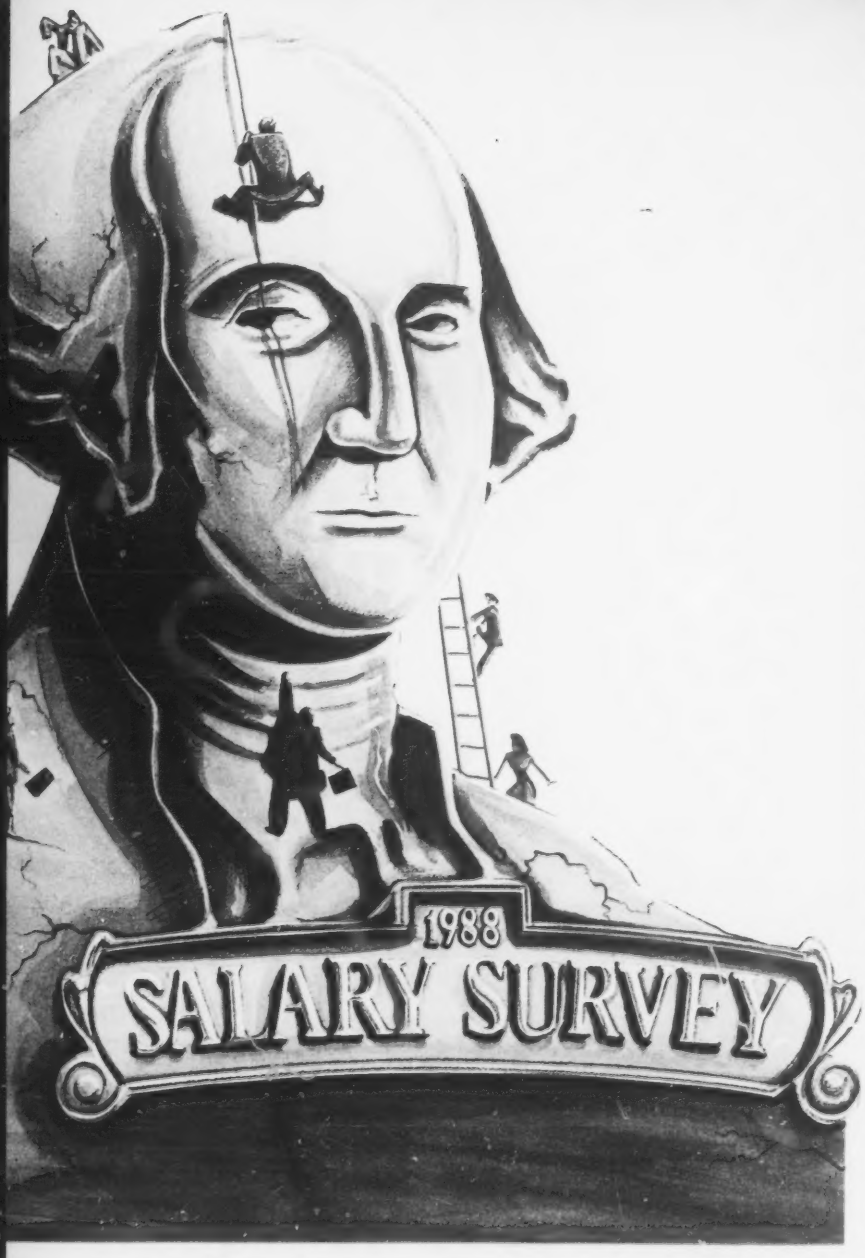
Speed of delivery

Prices

New orders



by Ron Stevens, Managing Editor



We at *PurchasingWorld* magazine consider this survey on salaries to be our benchmark for the years to come. Last year's was an attempt to get a clean batch of data—and was mostly successful. This year, however, we're satisfied that we have not only solid results but a better distribution of respondents in several categories.

Last year we didn't get an optimum geographical distribution; this year that's been cleared up. Last year you told us we were asking too many questions, including job description information along with our salary survey; this year we simplified our requests, and got better information.

Our computer tabulating firm tells us that the data is clean and reliable (statistically valid) and, given all the other improvements, we're very happy with the results. We think purchasing professionals will be, too.

A brief word on our methodology: We sample only the top of our circulation list, which includes the decision makers and top people in purchasing departments across the land. Our intention is to avoid the random nature of surveys which can be filled out by people who don't actually know important details such as what other members of their department are making and what their responsibilities, educational level, time on the job and even perks are—let's face it, we want complete and accurate answers, as much as possible.

We take an *nth* name basis sample of that top list, making sure we have good geographic distribution, and mail out the questionnaires. And the results are in.

The envelope, please...

The good news is that salaries are up almost across the board from last year. And, continuing to hit the high points, purchasing departments are not shrinking as fast as

continue their climb

they were. On the downside, the number of women and minorities involved in purchasing remains low, and their salaries are markedly lower, too.

The largest category responding to our survey was, as it should be, purchasing directors—we've always referred to them as directors of purchasing—(at 26.9%), followed by vice presidents (19.4%), and then purchasing managers (almost 17%). Another large category of respondents were materials managers, at 11.9%.

Respondents indicated that they reported primarily to vice presidents (34.5%) or ceo/presidents (31.1%).

How many purchasing people?

We also asked the size of purchasing departments, and found that among our respondents the overwhelming majority (76.4%) work in departments of 10 or fewer people. Another 11.5% are in departments of 11-20.

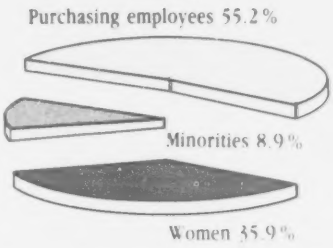
An interesting jump occurs to the next largest category, where 5.7% reported they work in departments of 100 or more purchasing professionals.

Related to this question was one on the size of the companies our respondents work for: Not unexpectedly, the largest category included the smallest companies. As it turns out, 25.6% of purchasing professionals work for companies with fewer than 100 employees. Companies with 100-249 employees accounted for 16.3% of our survey responses, and 16.9% of the respondents are employed by companies with 250-499 employees.

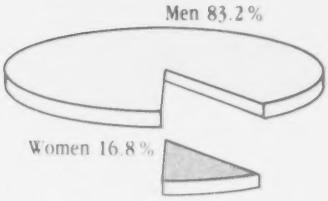
But our *second* largest category of respondents was from the *large* industry category—19.4% are in companies of 1,000-4,999 employees, and an additional 10% work for companies with more than 5,000 employees.

Continued on page 34...

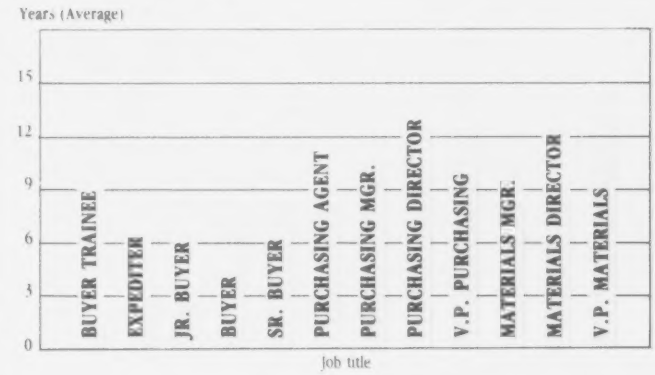
Women and minorities in purchasing



Gender of survey respondents



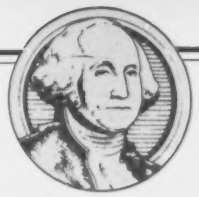
Time on the job



High/Low salaries by gender

Salary in thousands (High/Low)

GENDER	BUYER TRAINEE	EXPEDITER	JR. BUYER	BUYER	SR. BUYER	PURCH. AGENT	PURCH. MGR.	PURCH. DIRECTOR	V.P. PURCH.	MATERIALS MGR.	MATERIALS DIRECTOR	V.P. MATERIALS
LOW SALARIES												
Male	15.9	17.0	19.1	21.2	25.5	27.0	36.6	42.9	44.7	38.5	47.1	52.3
Female	18.0	15.3	17.8	23.3	30.3	29.3	44.5	37.0	37.5	22.0	59.0	
HIGH SALARIES												
Male	20.8	23.1	25.0	28.8	36.9	41.2	50.2	59.2	65.5	50.8	65.6	80.2
Female	13.0	12.8	19.2	26.1	46.7	34.4	54.0	48.5	51.5	58.0	52.5	



Income estimates for the surveyed companies showed that most, according to respondents, fall in the $5-25 million annual gross sales category (24.8%). The next most populous category was from $25-100 million (18.6%), followed by the 17.2% in the $1-5 million annual gross sales category. An additional 11.0% were in the $100-250 million range, and 9.0% fell in the $1 billion + category.

What does that translate into in terms of annual purchase volume? For 47.1% it means less than $10 million. For 25.8% it translates into $10-50 million, and for 14.8%, $50-100 million. Eleven percent purchase from $150-500 million annually, and only 1.3% spend more than $500 million in annual purchases.

In only two categories (materials manager and vice president of materials) did the low ranges of mean (in the statistical sense) salaries drop from those reported last year.

At the high end, three out of 12 categories reported lower mean salaries—so the overall picture is one of higher mean salaries at both ends of the range.

Buyer trainee—
low, $16,100; high, $20,300
Expediter—
low, $16,800; high, $21,300
Junior buyer—
low, $18,900; high, $23,900
Buyer—
low, $21,500; high, $28,500
Senior buyer—
low, $26,000; high, $37,600
Purchasing agent—
low, $27,200; high, $40,500
Purchasing manager—
low, $37,300; high, $50,500
Purchasing director—
low, $42,300; high, $57,900
Vice president, purchasing—
low, $44,000; high, $64,100
Materials manager—
low, $36,500; high, $51,500
Materials director—
low, $48,200; high, $63,600
Vice president materials—
low, $52,300; high, $80,200.

Give that to me in percentages

Respondents reported to us that their salaries were up from last year in every category, though of course the amounts varied. Buyer trainees, according to their managers, are up the most, with a 6.7% increase.

Expediters are making 4.3% more, junior buyers 5.3%; buyers 5.8%, and senior buyers are up 4.8%, as are purchasing agents. Purchasing managers have increased their pay by 6.0%, purchasing directors by 5.1%, vice presidents of purchasing are up by 5.5%.

Materials directors are getting 4.6% more, materials directors have gone up by 4.3% (the smallest reported increase) and vice presidents of materials are making 4.7% more than the year before.

As to frequency of salary increases, 89.5% of our respondents have annual raises, with an additional 3.9% getting their increases semi-annually.

The more you make, the more you get

What about incentives beyond salaries? Well, at the upper level job categories, such perks are pretty common.

Vice presidents of materials, for instance, report that 75% of them get incentives, as do 64.3% of materials directors, 52.2% of purchasing vice presidents and 56.7% of purchasing directors. As the job titles dip lower, so do the percentages of those reporting incentives: materials managers, 42.9%; purchasing managers, 45.1%; purchasing agents, 28.6%; senior buyers, 24.4% and buyers, 28.6%.

What form do the incentives take? Bonuses were the major reward, at 34.0%, with stock options accounting for 8.3% and incentive awards at 6.4%. (A minuscule 3.8% reported they get company cars.)

Further, the situation on incentives will remain the same for 78.9% of our respondents, increase for 16.5%, and decrease for only 4.5%.

How much education?

We asked our respondents to tell us how much education was expected of various job titles. Here are the results.

Buyer trainees are expected by 53.3% to have a high school education; 26.7% expect the trainee to have an associate degree and 20.0% expect a college degree.

Expediters are expected to have a high school degree by 81.0%, an associate degree by 14.3% and a college degree by 4.8%.

Junior buyers should have a high school education according to 46.2%, an associate degree according to 26.9% and the same percentage expects a college degree.

Buyers should have a high school education according to 44.6%; another 16.9% looks for an associate degree and 36.9% look for a college degree. A slim 1.5% look for an MBA.

Senior buyers are expected to be high school educated by 22.9%; the same percentage expects an associate degree, and 54.3% looks for a college degree.

Purchasing agents should be high school graduates, according to 40.4%; 14.9% expect an associate degree and 42.6% expect a college degree, while another 2.1% want an MBA for the job.

Purchasing managers need high school degrees according to 11.6% of respondents; 9.3% expect an associate degree, with 67.4% requiring a college degree, 7.0% an MBA and 4.7% a masters degree.

Purchasing directors should have a high school degree, felt 15.4%, while 11.5% expect an associate degree, 53.8% require a college degree, 13.5% require an MBA and 5.8% require a masters.

Continued from page 34

Vice presidents of purchasing should have a high school education, according to 10%, an associate degree according to 15.0%, a college degree for 70.0% and an MBA for 5.0%.

Materials managers are expected to have high school educations by 18.8%, an associate degree by the same number, a college degree by 56.3% and an MBA by 6.3%.

Materials directors should have a high school degree according to 8.3%,–a college degree by 83.3% and an MBA by 8.3%.

Vice presidents of materials should have high school behind them, according to 14.3%, a college degree according to 57.1%, an MBA according to 14.3% and a masters according to the same number.

According to gender

What's the percentage of women in purchasing? Overall our survey said 35.9%, with an even tinier 8.9% being minorities. Those filling out the survey responses, however, broke down a little differently: 83.2% of respondents were male, 16.8% were female. The message is clear—decisionmakers in the purchasing business are still predominantly men, not exactly representative of the number of women in purchasing.

The survey revealed an extremely uniform distribution by age. From 23 (youngest respondent) to 69, we ran approximately 2%—minimum—in every age. (There was also one 79-year-old respondent.) The largest concentrations were at age 35 (6.3%) and 45 (6.9%).

PW will make copies of the full 1988 salary survey available to readers who want more detailed information. Cost for the complete survey answers is $15. Mail checks to ***PurchasingWorld*** *Library, 6521 Davis Industrial Parkway, Solon, OH 44139.*

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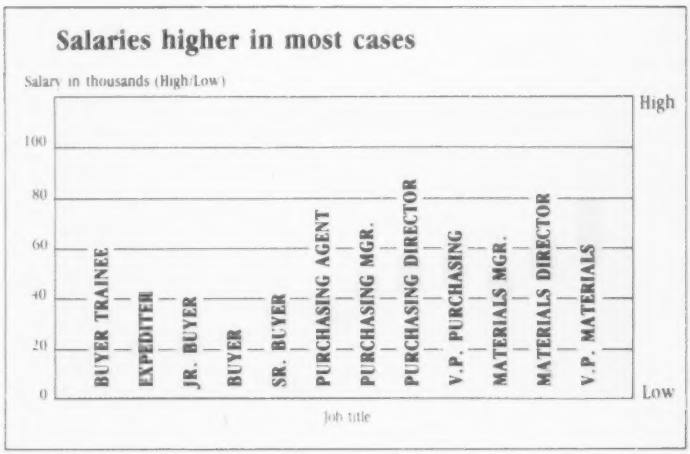
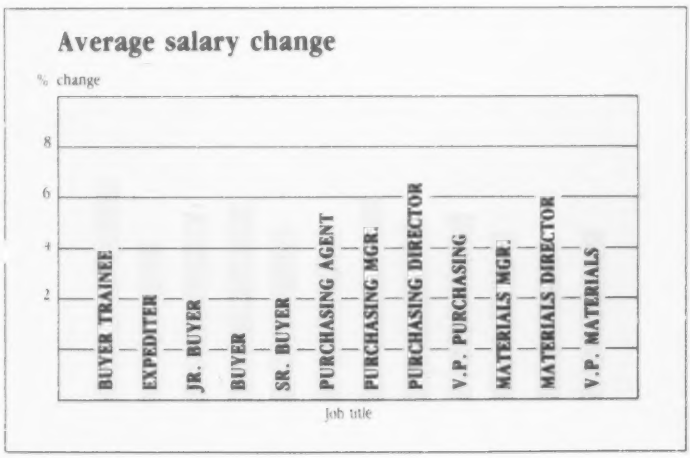
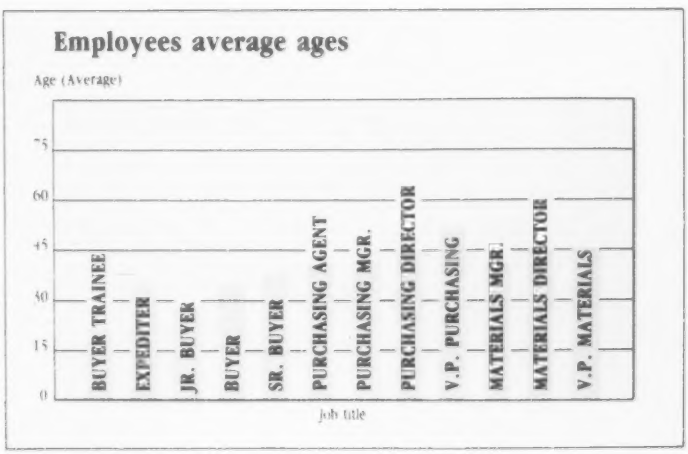






New survey says prices lower

The nation's industrial purchasing executives are cautiously optimistic on prices.

A new *PurchasingWorld* magazine survey suggests that the typical 1989 buying mix could be fractionally under that recorded for the year now ending. One key reason: The next 12 months will see fewer of the sharp raw material runups that characterized the past few quarters.

As one midwestern PM puts it, "The trend is still up, but we don't expect quite the same number of double-digit increases—particularly in metals, chemicals, plastics and paper—that characterized the current year."

And there are plenty of others who would agree. Thus 47% of responding buyers expect overall price increases to decelerate next year—with the remaining number split between those who see no change and those who anticipate some acceleration.

Other key findings of the just-completed survey:

- The average 1989 price increase will be just shy of 4%. Nothing great—but still a bit under the close-to-5% estimate for the current year. Equally significant, only a handful of respondents anticipate overall increases in the 7%-plus range—well under the 33% who were hit with these kinds of boosts during the current year.
- The study also confirms the feeling noted above that raw materials won't be quite the problem they were last year. Over the next 12 months, for example, the average raw material hike is put at about 3.8%.
- Good news on the office equipment front—where only a 3% increase is projected. An even smaller 2% gain is seen for freight. The latter is somewhat under the estimate made by Wharton Econometrics Forecasting Associates—but that is probably because the Wharton figures don't always pick up all the price shading.
- Energy, too, is expected to be less buoyant—with the small 2.6% advance understandable considering the recent tumble in crude oil quotes.
- Somewhat less rosy is the prediction that component parts (reflecting good demand and this year's raw material cost runup) could accelerate a bit next year. The purchasing manager forecast here: 3.8% in 1989 *versus* 3.3% for 1988.

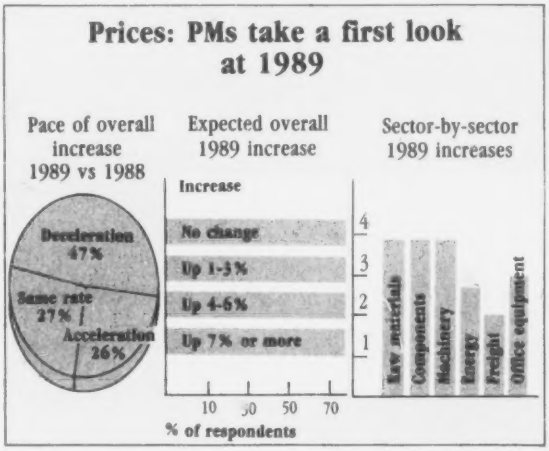
As for specific commodities where increases have been most bothersome—they cover the gamut of industrial purchases. Included are such key areas as packaging, carbon steel, stainless steel, plastic resins, chemicals, various component parts (including bearings and electric motors), machinery and electronic components.

The major reasons given for these increases are higher manufacturing costs, capacity restraints, and a continuing weak U.S. dollar. Those noting the last factor add that it is enabling domestic suppliers to boost tags.

At the other end of the spectrum, there are a few items mentioned which could be leveling as 1989 wears on. These include refined petroleum products, copper, aluminum, zinc, selected office equipment products and some electronic memory devices.

Whatever the individual product pressures, buyers continue to emphasize strategies that will keep advances down to a minimum. As in the past, long-term contracts and blanket ordering head the list. But other approaches are noted, too—including more value analysis, working closer with vendors, the narrowing down of supplier bases to develop more buying clout, and the insistence on better quality.

As one purchasing executive sums it up: "It may not be a buyers' market. But it's not an all-out sellers' one either. There's still plenty of opportunity to shave something off original asking prices—at least in areas where relatively large volume buys are involved." ***PW***



Quality appears in numerous forms

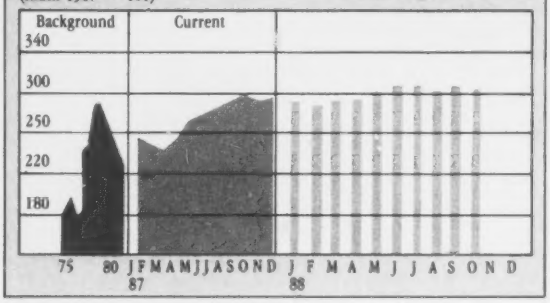
Quality means many things to many people. To some it is zero defects, to others it's waste elimination. To Jerry W. Claunch, C.P.M., senior vice president, Professionals for Technology Associates, Inc., Plantsville, CT, quality to a great degree is 'supplier certification.' He sees supplier certification as, "a tool you can use to eliminate the causes of wasted time, money and labor and to destroy the 'ubiquitous Re—rework, repair, reject, refuse, etc.'"

Like many other quality programs the theme of supplier certification is 'make it right the first time.' Claunch explained to the NAPM Conference attendees, "This means an emphasis on defect prevention so that routine inspection is no longer needed. Consequently the burden of proof will not rest upon inspectors... quality can not be inspected into a part.

Raw material price barometer

(Index 1967 = 100)

Last month 304.2
Month before 306.4
Year ago 294.6



LATEST SPOT MARKET PRICES

	Latest price	Previous month	Year ago
FERROUS METALS			
Pig iron, basic, valley, gross ton	213.00	213.00	213.00
Pig iron, Bessemer, Pitts., gross ton	213.00	213.00	213.00
Steel, billets, Pitts., net ton	367.00	367.00	367.00
Steel, structural shapes, Pitts., cwt.	23.90	23.90	23.90
Steel, structural shapes, Chi., cwt.	23.90	23.90	23.90
Steel, structural shapes, Los Angeles, cwt.	23.90	23.90	23.90
Steel, bars, dlvd. Phila., cwt., merchant quality	16.50	16.50	16.50
Steel, bars, Pitts., cwt.	16.50	16.50	16.50
Steel, bars, C.R., Pitts., cwt.	19.45	19.45	19.45
Steel, plates, Pitts., cwt.	23.25	22.75	19.75
Steel, plates, H.R., Pitts., cwt.	23.25	22.75	19.75
Steel, sheets, C.R., Detroit, cwt.	28.15	28.15	28.15
Steel, strip, C.R., Chi., cwt.	36.18	36.18	36.18
Steel, basic wire, Pitts., cwt.	23.65	23.65	23.65
NONFERROUS METALS			
Aluminum, ingot, lb. (market place)	1.075	1.010	.810
Antimony, N.Y., dealer, lb.	0.95	1.05	1.09
Beryllium-copper, cost ingot, lb.	5.90	5.90	5.90
Brass, red, 85%, [sheet], lb.	2.08	1.88	1.64
Brass, yellow, [sheet], lb.	2.04	1.84	1.59
Cadmium, N.Y., dealer, lb.	6.00	6.20	3.05
Copper, electrolytic, wire bars, refd., lb.	1.45	1.25	1.00
Copper sheet, over 24 in., lb.	2.17	1.97	1.73
Lead, common, N.Y., lb.	.40	.40	.42
Magnesium, pig ingot, [99.8%], lb.	1.58	1.58	1.53
Mercury, 20 fl. lots, N.Y., fl.	285.00	310.00	355.00
Molybdenum, oxide, dealer, lb.	3.45	3.49	2.79
Nickel, cathode, dealer, lb.	5.35	4.98	2.71
Platinum, dealer, oz.	574.00	520.00	495.00
Silver, N.Y., oz.	6.49	6.40	6.63
Tin, N.Y., dealer, lb.	3.41	3.36	3.23
Zinc, Prime West, East St. Louis, lb.	.725	.690	.420
Zinc, die casting alloy, No. 3, lb.	.805	.775	.475
PAPER			
Uncoated book #3 offset, ton	955.00	955.00	890.00
Watermarked bond, ton	1080.00	1080.00	985.00
Gummed sealing tape, carton	17.87	17.97	17.17
Grocery sacks, ton	460.00	460.00	410.00
Solid bleached paperboard, ton	685.00	685.00	650.00
Kraft linerboard, 42 lb., unbleached, ton	410.00	410.00	380.00
TEXTILES			
Burlap, 10 oz., 40", N.Y., yd.	.277	.276	.271
Cotton drill, 1.85, 59", 68x49, N.Y., yd.	0.89	1.20	1.24
Cotton middling, 1", N.Y., lb.	.523	.505	.609
Printcloth, 48", 80x80, N.Y., spot, yd.	.480	.480	.620
Army duck, 37", 13 oz., yd.	1.50	1.51	1.51
Blended printcloth, 64", 78x54, yd.	.66	.66	.93
20s combed yarns	1.80	1.96	1.98
Wool 64s, Staple, lb.	4.75	4.50	3.00

	Latest price	Previous month	Year ago
CHEMICALS			
Acrylonitrile, tanks, lb.	.360	.360	.395
Ammonia, anhydrous, tankcars, Gulf Coast, ton	91.00	91.00	75.00
Benzene, petroleum, tanks, Houston, gal.	1.26	1.18	.90
Caustic soda, 76% solid, drums, carlots, cwt.	28.00	26.00	26.00
Cresylic acid [over 25%], tanks, lb.	.58	.58	.58
Formaldehyde, USP, 37%, [12% to 15% meth.], tanks, lb.	.106	.106	.106
Glycerine, synthetic, tanks, lb.	.735	.735	.780
Methanol, syn., tanks, 4,000 gals., f.o.b. Gulf Coast plants	.58	.58	.36
Naphthalene, crude, tanks, lb.	.16	.22	.22
Phthalic anhydride, tanks, lb.	.35	.35	.32
Polyethylene resin, low density liner film grade (market place), lb.	.515	.515	.385
Polypropylene, homopolymer grade (market price), lb.	.510	.510	.470
Polystyrene, general purpose grade (market price), lb.	.600	.600	.520
Polyvinyl chloride, pipe grade (market price), lb.	.440	.440	.375
Soda ash, 58%, light carlots, cwt.	6.15	6.15	6.15
Styrene monomer, 99.6%, tanks, lb.	.450	.470	.400
Sulfur, crude, ex-terminal, Tampa, Fla., lt.	138.00	132.00	127.50
Sulfuric acid, 66%, commercial, tanks, ton	66.86	66.86	66.86
Titanium dioxide, anatase, reg., carlots lb.	.95	.95	.80
Xylene tanks, gal.	1.13	1.00	.78
BUILDING MATERIALS			
Lumber, 2x4 fir, mbf, cl	334.94	329.80	332.60
Lumber 2x2 pine, mbf, cl	319.18	314.70	330.65
Plywood, plyform, ¾", msf, cl	567.75	569.20	575.20
Plywood, ¾", msf, cl	382.32	387.70	391.45
Cement, bulk, ton, tl	64.27	64.42	63.73
Sand, ton, cl	7.22	7.16	7.12
Ready-mix concrete, 3,000 psi/cu. yd., 15 cu. yd.	48.31	48.41	48.88
Crushed stone, 1½", ton, cl	6.75	6.99	8.31
Concrete blocks, sand/gravel, 8"x8"x16", ea., tl	92.28	91.99	90.00
Gypsum sheathing, ½"x1"x8", msf, tl	228.43	228.43	226.69
Brick, common, per thousand, tl	229.22	229.22	198.26
Asphalt paving, AC-20	114.39	115.64	140.34
Concrete sewer pipe, 12", prem. joint, per foot, cl	17.73	N.A.	N.A.
FUELS			
Crude oil (W. Tex Int Cush), bbl.	13.95	14.10	18.95
Diesel (reseller rack, Chi), gal.	.463	.388	N.A.
Fuel oil No. 2 (N.Y.), gal.	.441	.401	.565
Fuel oil No. 2 (Gulf spot), gal.	.426	.374	N.A.
Fuel oil No. 6 (N.Y.) contract cargo, bbl.	17.00	15.00	N.A.
Gasoline (reg laded NY), gal.	.580	.498	.538
Gasoline (reg unlded NY), gal.	.560	.478	.525
Kerosene (reseller rack, Chi), gal.	.511	.435	N.A.
Propane (Mt. Belvieu, Tex), gal.	.195	.198	.258
SCRAP MATERIALS			
Steel, No. 1, hvy., dlvd., Pitts., ton	114.00	117.00	114.00
Steel, No. 1 hvy., dlvd., Chi., ton	108.00	115.00	115.00
Copper, No. 1, East, wholesale buy, dlvd., lb.	1.170	1.060	.890
Copper, No. 2, East, wholesale buy, dlvd., lb.	1.015	.925	.800
Brass, red, East, wholesale buy, dlvd., lb.	1.130	1.020	.850
Brass, yellow, East, wholesale buy, dlvd., lb.	.510	.470	.365
Alum., old sheet/cast, E., wholesale buy, dlvd., lb.	.610	.610	.500
Alum., mixed clip., E., wholesale buy, dlvd., lb.	.710	.700	.565
Zinc, old, East, wholesale buy, dlvd., lb.	.240	.240	.200
Lead, clean solids, East, wholesale buy, dlvd., lb.	.260	.245	.275
Paper, No. 1 mixed, dlr., N.Y., ton	Nom.	Nom.	Nom.
Paper, old corrug. box, dlr., Chi., ton	15.00	20.00	35.00
Paper, old corrug. box, dlr., N.Y., ton	Nom.	5.00	20.00
Old newspapers, Chi., ton	Nom.	5.00	N.A.
Old white ledger, Chi., ton	80.00	85.00	N.A.

[Sources: Metals Week, American Metal Market, Engineering News-Record (20-city averages), The Wall Street Journal, Journal of Commerce, Chemical Marketing Reporter.]